

**I. AMENDMENTS TO THE CLAIMS:**

Kindly amend claims 1-3, 6 and 7 as follows.

The present listing of claims replaces all prior listings or versions of claims in the above-captioned application.

**LISTING OF CLAIMS:**

1. (Currently Amended) A corrosion-resistant metal made sensor for measuring mass flow rate and pressure of fluid, comprising:

(a) a mass flow rate sensor part comprising

- i. a corrosion-resistant metal substrate; and
- ii. a thin film forming a temperature sensor and a heater installed on a back face side of a fluid contacting surface of the corrosion-resistant substrate; and

(b) a pressure sensor part comprising a thin film forming a strain~~stain~~ sensor element installed on the back face side of the fluid contacting surface of the corrosion-resistant metal substrate.

2. (Currently Amended) A corrosion-resistant metal made sensor as claimed in Claim 1, wherein the corrosion-resistant metal substrate is fitted into a mounting groove of a corrosion-resistant metal made sensor base ~~such~~ so that the fluid contacting surface is exposed outwardly, and a peripheral edge of the corrosion-resistant metal substrate is hermetically welded to the sensor base.

3. (Currently Amended) A corrosion-resistant metal made sensor as claimed in Claim 1, wherein output drift ~~to pressure~~ of the mass flow rate sensor part due to pressure changes of fluid is corrected by output of the pressure sensor part.

4. (Previously Presented) A corrosion-resistant metal made sensor as claimed in Claim 1, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

5. (Previously Presented) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 1 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.

6. (Currently Amended) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 2, wherein the sensor base is positioned inside a fluid passage of a body equipped with the fluid passage that communicates between a flow-in inlet for fluid and a flow-out outlet for the fluid by installing a metal gasket in order that hermeticity between the body and the sensor base is held by ~~thrust~~thrusting by the metal gasket through mediation of the sensor base, and at the same time stiffness of a structural component disposed directly above the metal gasket ~~to~~relatively raises hermeticity between the body and the sensor base, thus suppressing strain of the mass flow rate sensor part and the pressure sensor part caused by ~~thrust~~thrusting by the metal gasket.

7. (Currently Amended) A corrosion-resistant metal made sensor as claimed in Claim 2, wherein output drift ~~to pressure~~ of the mass flow rate sensor part due to pressure changes of fluid is corrected by output of the pressure sensor part.

8. (Previously Presented) A corrosion-resistant metal made sensor as claimed in Claim 7, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

9. (Previously Presented) A corrosion-resistant metal made sensor as claimed in Claim 2, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

10. (Previously Presented) A corrosion-resistant metal made sensor as claimed in Claim 3, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

11. (Previously Presented) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 2 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.

12. (Previously Presented) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 3 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.

13. (Previously Presented) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 4 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.